abcam

Product datasheet

Anti-Hepatitis C Virus NS3 antibody [8 G-2] ab65407

21 References 3 Images

Overview

Product name	Anti-Hepatitis C Virus NS3 antibody [8 G-2]
Description	Mouse monoclonal [8 G-2] to Hepatitis C Virus NS3
Specificity	Reacts efficiently with JFH-1 strain of HCV (genotype 2a)
Tested applications	**Suitable for:** IHC-P, WB, ELISA, ICC/IF
Species reactivity	**Reacts with:** Hepatitis C virus
Immunogen	recombinant NS3 protein
Epitope	amino acids 1340 – 1470 of HCV polyprotein
Positive control	Huh7 cells harbouring HCV replicon (genotype 1b), Huh7 cells infected with HCV strain JFH-1 (genotype 2a)

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.01% Sodium Azide Constituents: 10mM PBS
Purity	Immunogen affinity purified
Clonality	Monoclonal
Clone number	8 G-2
Isotype	IgG1

Applications

Our Abpromise guarantee covers the use of **ab65407** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 70 kDa.
ELISA		Use at an assay dependent concentration.
ICC/IF		1/500.

Target

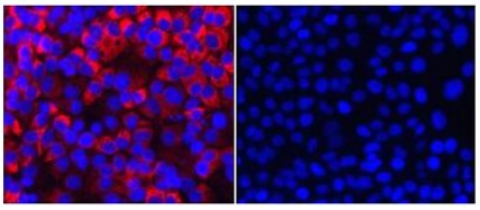
Relevance

HCV is a positive, single-stranded RNA virus in the Flaviviridae family. The genome is approximately 10,000 nucleotides and encodes a single polyprotein of about 3,000 amino acids. The polyprotein is processed by host cell and viral proteases into three major structural proteins including NS3, and several non-structural proteins necessary for viral replication. The NS3 part of the polyprotein displays three enzymatic activities: serine protease, NTPase and RNA helicase. The NS3 serine proteinase (NS3P) is a non-structural hepatitis C protein responsible for proteolytic processing of other non-structural proteins; because of this, it is also the most extensively studied protein of the Hepatitis C genome. It is responsible for proteolytic processing of the entire downstream region of the HC polyprotein, catalyzing cleavage at the NS3/NS4a, NS4a/NS4b, NS4b/NS5a, and NS5a/NS5b sites to release the mature NS3, NS4a, NS4b, NS5a, and NS5b proteins.For proper function, NS3 requires NS4a as a cofactor, but, interestingly enough, NS3 also cleaves the NS4a protein. The molecular weight of the monomer NS3P is 70 kDa.

Cellular localization

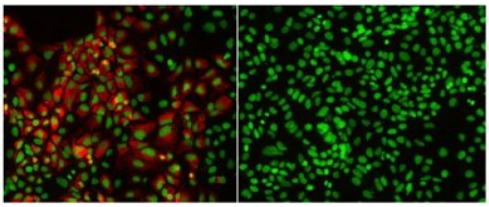
Endoplasmic reticulum membrane

Images



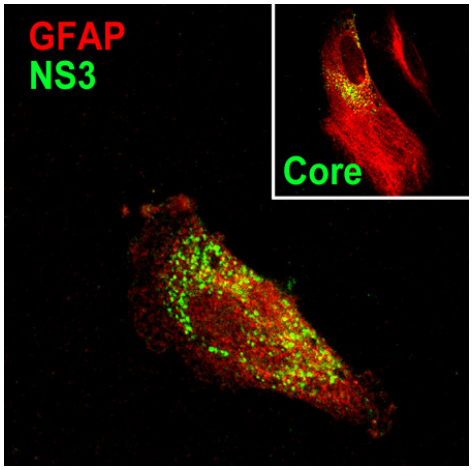
Immunocytochemistry/ Immunofluorescence - Anti-Hepatitis C Virus NS3 antibody [8 G-2] (ab65407)

ab65407 at 1/500 dilution staining Huh7 cells harbouring HCV replicon (genotype 1b) (left) and Huh7 cells (right). Nuclei were visualised with DAPI (shown in blue).



Immunocytochemistry/ Immunofluorescence - Anti-Hepatitis C Virus NS3 antibody [8 G-2] (ab65407)

ab65407 at 1/500 dilution staining Huh7 cells infected with HCV strain JFH-1 (left) and mock infected cells (right). Nuclei were visualised with DAPI (shown in green).



Immunocytochemistry/ Immunofluorescence - Anti-Hepatitis C Virus NS3 antibody [8 G-2] (ab65407)

Image from Vivithanaporn P et al., PLoS One. 2010 Sep 21;5(9):e12856. doi: 10.1371/journal.pone.0012856.; Fig 1.; September 21, 2010, PLoS ONE 5(9): e12856.

Immunofluorescence analysis of Hepatitis C infected Human fetal astrocytes, staining Hepatitis C Virus NS3 with ab65407. An AlexaFlour®488-conjugated anti-mouse IgG was used as the secondary antibody.

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